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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,741	01/22/2002	Michael Kuechel	0250/US	5484
30333	7590	04/19/2004	EXAMINER	
FRANCIS J. CAUFIELD 6 APOLLO CIRCLE LEXINGTON, MA 02421-7025			LYONS, MICHAEL A	
			ART UNIT	PAPER NUMBER

2877

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/053,741	<b>Applicant(s)</b> KUECHEL, MICHAEL	
	<b>Examiner</b> Michael A. Lyons	<b>Art Unit</b> 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-88 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,25,53,70 and 85-88 is/are rejected.
- 7) ☒ Claim(s) 2-24,26-52,54-69 and 71-84 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

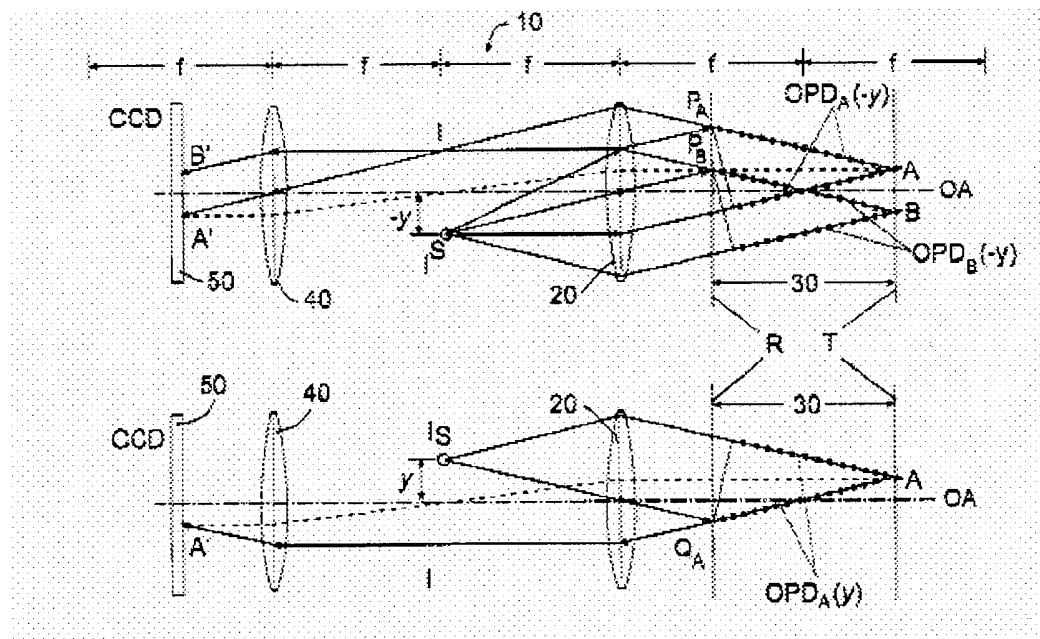
## DETAILED ACTION

### Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).



Claims 1, 25, 85, and 86 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4, 5, 6, and 8 of U.S. Patent No. 6,643,024. Although the conflicting claims are not identical, they are not patentably distinct from each other because while the patent fails to claim the

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“substantially identical optical path differences” of the present application (these substantially identical optical path differences are only in the specification of the patent), the claims in the patent are broader in scope than the present claims. The patented claims cover interfering wavefronts and directing radiation to an interferometer from at least two different locations. Since no explicit reference is made in the claim to any sort of quantification of a path difference within the interferometer, and since path differences are necessary to generate interference, the patented claims can anticipate any set of path differences, including the identical optical path differences as claimed in the present case.

Claims 53, 70, 87, and 88 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10 and 13 of U.S. Patent No. 6,643,024. Although the conflicting claims are not identical, they are not patentably distinct from each other because while the patent fails to claim the “substantially identical optical path differences” of the present application (these substantially identical optical path differences are only in the specification of the patent), the claims in the patent are broader in scope than the present claims. The patented claims cover interfering wavefronts and directing radiation to an interferometer from at least two different locations. Since no explicit reference is made in the claim to any sort of quantification of a path difference within the interferometer, and since path differences are necessary to generate interference, the patented claims can anticipate any set of path differences, including the identical optical path differences as claimed in the present case.

***Allowable Subject Matter***

Claims 2-24, 26-52, 54-69, and 71-84 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed February 6, 2004 have been fully considered but they are not persuasive. The examiner appreciates the chart filed by the applicant comparing the claims in the present application with the claims in the Deck et al. patent. However, the rejection still stands. First off, the arguments regarding the prosecution of the previous application and the patent right dates are moot, as they do not deal with the claims of each case that form the double patenting rejection.

Additionally, the claims stand because the claims in the patent, if treated in a traditional, non-double patenting situation, would still be used to reject the claims in the present case. The applicant argued that the present claims refer, in some cases, to an "illumination" apparatus and method, while the claims in the patent refer to an "interferometric" apparatus and method. An interferometer uses light reflecting or transmitting through a test object. The light has to illuminate the test object for the measurement to occur, making the interferometer a type of illumination device.

Furthermore, as discussed in the rejection above, while the patented claims disclose directing radiation on the object to be measured from "at least two different locations", the present claims merely state that radiation is directed on the object from "different locations". Since different locations refers to plural locations, radiation from

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the device in the present application has to be directed from two or more (at least two) different locations to the test object.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Lyons whose telephone number is 571-272-2420. The examiner can normally be reached on Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MAL  
April 6, 2004



**Samuel A. Turner**  
Primary Examiner